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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,653	01/25/2002	Martin Franz	YOR9-2001-0738 US1 (8728-	9856

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F. CHAU & ASSOCIATES, LLP		BETIT, JACOB F

ART UNIT	PAPER NUMBER
2164	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/056,653	FRANZ ET AL.
	Examiner	Art Unit
	Jacob F. Betit	2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,13-15 and 23-33* is/are rejected.

7)☒ Claim(s) *4-12 and 16-22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

DETAILED ACTION

Claim Objections

1.   Claims 6 and 27 are objected to under 37 CFR 1.75(c), as being of improper dependent

form for failing to further limit the subject matter of a previous claim. Applicant is required to

cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or

rewrite the claim(s) in independent form.

Claim 6 recites the limitation, "at least one of the plurality of bins represents an empty

bin" which contradicts the limitation of claim 5, which states "each of the plurality of bins to

represent a numerical interval that contains at least one of the occurrence frequencies". "A claim

in dependent form shall contain a reference to a claim previously set forth and then specify a

further limitation of the subject matter claimed. A claim in the dependent form shall be

constructed to incorporate by reference all the limitations of the claim to which it refers" (see 35

U.S.C. 112 fourth paragraph). Since claim 6 recites limitations that contradict recited limitations

of claims 5, it is not in proper dependent form.

Claim 27 recites the limitation, "at least one of the plurality of bins represents an empty

bin" which contradicts the limitation of claim 26, which states "each of the plurality of bins to

represent a numerical interval that contains at least one of the parameter values". "A claim in

dependent form shall contain a reference to a claim previously set forth and then specify a further

limitation of the subject matter claimed. A claim in the dependent form shall be constructed to

incorporate by reference all the limitations of the claim to which it refers" (see 35 U.S.C. 112

fourth paragraph). Since claim 27 recites limitations that contradict recited limitations of claims

26, it is not in proper dependent form.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 13-14, 23-24, 26, 28, and 30-33 are rejected under 35 U.S.C. 102(b) as being

anticipated by <u>Spencer</u> (U.S. patent No. 5,915,249).

As to claim 1, <u>Spencer</u> teaches a method for compressing an index file in an information

retrieval system that retrieves information from a plurality of documents, each of the plurality of

documents having features occurring therein, the method comprising the step of:

representing occurrence frequencies of the features in the plurality of documents in a

compressed format in the index file (see column 9, lines 25-51).

As to claim 2, <u>Spencer</u> teaches wherein the features are textual (see column 9, lines 25-

51).

As to claim 13, <u>Spencer</u> teaches an apparatus for compressing an index file in an information retrieval system that retrieves information from a plurality of documents, each of the plurality of documents having features occurring therein, the apparatus comprising:

a compression device for representing occurrence frequencies of the features in the plurality of documents in a compressed format in the index file (see column 9, lines 25-51).

As to claim 14, <u>Spencer</u> teaches wherein the features are textual (see column 9, lines 25-51).

As to claim 23, <u>Spencer</u> teaches method for compressing an index file in an information retrieval system that retrieves information from a plurality of documents, each of the plurality of documents having features occurring therein, each of the features having parameters corresponding thereto, the method comprising the step of:

mapping parameter values corresponding to the parameters of the features into a plurality of bins (see column 9, lines 25-51, where "parameter values" is read on document identifier which is mapped to the document); and

storing bin identifiers in the index file, each of the bin identifiers identifying a bin to which is assigned at least one individual parameter value corresponding to at least one individual parameter (see figure 3a).

As to claim 24, <u>Spencer</u> teaches wherein the features are textual (see column 9, lines 25-51).

As to claim 26, <u>Spencer</u> teaches further comprising the step of establishing each of the

plurality of bins to represent a numerical interval that contains at least one of the parameter

values (see column 9, lines 25-51, where each interval is one number that includes one

document).

As to claim 28, <u>Spencer</u> teaches further comprising the step of establishing each of the

plurality of bins to represent a different numerical interval, such that the different numerical

interval represented by each of the plurality of bins contains a substantially same number of the

parameter values (see column 9, lines 25-51).

As to claim 30, <u>Spencer</u> teaches wherein said mapping step respectively maps only a

single parameter and a corresponding parameter value into each of the plurality of bins (see

column 9, lines 25-51), the method further comprises the step of scoring at least one of the

plurality of documents with respect to a query, and said scoring step comprises the step of

computing a parameter value for a given one of the plurality of bins based on the single

parameter and corresponding parameter value mapped thereto (see column 12, line 50 through

column 13 line 2).

As to claim 31, <u>Spencer</u> teaches further comprising the step of establishing bin

boundaries for the plurality of bins based on a methodology employed to score the plurality of

documents with respect to queries, the bin boundaries defining intervals within which the

parameter values fall (see column 9, lines 25-51).

As to claim 32, <u>Spencer</u> teaches further comprising the steps of:

receiving a query having at least one parameter (see column 12, lines 6-24); and

computing a relevance score for at least one of the plurality of documents with respect to

the query, based on the bin identifiers (see column 12, line 50 through column 13, line 2).

As to claim 33, <u>Spencer</u> teaches wherein the method is implemented by a program

storage device readable by machine, tangibly embodying a program of instructions executable by

the machine to perform said method steps (see abstract).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 3, 15, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over

<u>Spencer</u> (U.S. patent No. 5,915,249) in view of <u>Lee</u> (U.S. patent No. 6,704,725 B1).

As to claims 3 and 15, <u>Spencer</u> does not teach wherein the features are non-texual.

<u>Lee</u> teaches wherein the features are non-texual (see column 3, lines 1-32).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Spencer by the teachings of Lee because wherein the features are non-texual would allow the user to search multimedia data (see Lee, abstract).

As to claim 25, Spencer does not teach wherein the features are non-texual.

Lee teaches wherein the features are non-texual (see column 3, lines 1-32).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Spencer by the teachings of Lee because wherein the features are non-texual would allow the user to search multimedia data (see Lee, abstract).

6.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer (U.S. patent No. 5,915,249)

As to claim 27, Spencer does not teach wherein at least one of the plurality of bins represents an empty bin.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Spencer to include wherein at least one of the plurality of bins represents an empty bin because this would allow documents to be added to the search at a later time.

7.   Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer (U.S.

patent No. 5,915,249) in view of Scott et al. (U.S. patent application publication No.

2002/0049760 A1).

        As to claim 29, Spencer teaches the method further comprises the step of scoring at least

one of the plurality of documents with respect to a query, and said scoring step comprises the

step of computing a parameter value for a given one of the plurality of bins as a weighted

average of the parameter values contained within the given one of the plurality of bins (see

column 12, line 50 through column 13 line 2).

        Spencer does not teach wherein said mapping step respectively maps more than a single

parameter and a corresponding parameter value into each of the plurality of bins.

        Scott et al. teaches wherein said mapping step respectively maps more than a single

parameter and a corresponding parameter value into each of the plurality of bins (see paragraph

0027).

        It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Spencer by the teachings of Scott et al. because wherein

said mapping step respectively maps more than a single parameter and a corresponding

parameter value into each of the plurality of bins would allow a user to retrieve a desired file

from a network and have the best sources automatically chosen based on the chosen ID (see

paragraph 0027).

Allowable Subject Matter

8.   Claims 4-5, 7-12, and 16-22 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

9.   Claim 6 would be allowable if rewritten to overcome the objection(s) under 37 CFR

1.75(c), set forth in this Office action and to include all of the limitations of the base claim and

any intervening claims.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jacob F. Betit whose telephone number is (571) 272-4075. The

examiner can normally be reached on Monday through Friday 9 am to 5 pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jfb
6 Dec 2004

SAM RIMELL
PRIMARY EXAMINER